Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Canceled).

2. (Currently Amended). A method according to ~~claim 1~~claim **9**, said applying a source of DC current comprises applying a DC constant current source to the receiver.

3. (Currently Amended). A method according to ~~claim 1~~ claim **9**, said applying a source of DC current comprises applying a DC constant voltage source to the receiver.

4. (Currently Amended). A method according to ~~claim 1~~claim **9**, said applying a source of DC current includes applying two separate current sources to said receiver when said receiver input is differential.

5. (Original). A method according to claim **4**, said applying two separate currents sources includes applying two currents which have substantially equal but opposite values.

6. (Original). A method according to claim **4**, said applying two separate current sources includes applying two DC constant voltage sources whose voltage values are equal to the voltage that would be measured at the outputs of said DC constant current sources.

7. (Currently Amended). A method according to ~~claim 1~~claim **9**, in which said impedance is a resistor.

8. (Currently Amended). A method according to ~~claim 1~~claim 9, in which said impedance is an inductor.

9. (Currently Amended). ~~A method according to claim 1, further~~ A method for testing circuits that transmit and/or receive data values via high frequency signals, using only low frequency analog test circuitry, comprising:

a. coupling a transmitter of said signals to a receiver via a capacitance and connecting an input of said receiver to a bias voltage;

b. applying a source of DC current to said receiver input via an impedance;

c. transmitting one or more sequences of different data values while applying one of at least two values of said DC current, including selecting transmitted data values so as to increase the susceptibility of signals to circuit parameters; and

d. testing received data values.

10. (Currently Amended). A method according to ~~claim 1~~claim 9, said testing received data values includes measuring bit error rate (BER) of said signals.

11. (Currently Amended). A method according to ~~claim 1~~claim 9, further including attenuating the signal level of the transmitted signal relative to its maximum signal level.

12. (Original). A method according to claim **11**, said attenuating the signal level including reducing the drive current of the transmitter.

13. (Original). A method according to claim **11**, said attenuating the signal level including applying a resistor network between said transmitter and said receiver.

14. (Original). A method according to claim **11**, said attenuating the signal level including connecting a load capacitor.

15. (Canceled).

16. (Currently Amended). A circuit ~~as defined in claim 15, further including:~~ for testing circuits that transmit and/or receive data values via high frequency signals, using only low frequency analog test circuitry, comprising:

a transmitter for transmitting said signals;

a receiver for receiving said signals;

a coupling capacitor connected between said transmitter and said receiver; and

means for generating a variable bias voltage connected to at least one receiver input;

means for resistively attenuating signals output by said transmitter;

a load capacitor having a value which causes signal transition times greater than one data unit interval connected between said transmitter and said receiver.

17. (Canceled).

18. (Canceled).

19. (Original). A method for testing the performance of the input and/or output of a digital circuit, comprising:

attenuating a differential signal applied to or output from said circuit relative to a normal voltage swing of said signal and filtering said signal using a capacitance having a value with a time constant that is comparable to a data bit duration (unit interval) to produce a filtered signal;

AC-coupling said filtered signal to the inputs of a differential receiver whose inputs can be biased to different DC bias voltages;

while monitoring bit error rate (BER) of said signal, adjusting bias voltage to increase or decrease the amplitude of single-ended logic 1's in the filtered signal and adjusting the number of consecutive logic 1's in test patterns used to generate said signal so that said capacitance permits the received edge timing to be adjusted precisely; and

calculating the amplitude of the signal based on measured average voltages of the signal while the percentage and grouping of logic 1's in the signal are adjusted.